

1 **AMENDMENTS TO THE CLAIMS**

2 Please amend the claims of the present application as set forth below. This
3 listing of claims will replace all prior versions and listings of claims in the
4 application.

5

6 **Listing of Claims**

7

8 1. (Original): A server system, comprising:
9 one or more computers; and
10 an application executing on the computers to handle client requests, the
11 application comprising:

12 a business logic layer to process the client requests according to a particular
13 business domain and produce replies to be returned to the clients in response to the
14 client requests; and

15 a presentation layer separate from, but in communication with, the business
16 logic layer to structure the replies in a manner that makes the replies presentable
17 on different types of client devices.

18

19 2. (Original): A server system as recited in claim 1, wherein the
20 application is reconfigurable to other business domains by substituting other
21 business logic layers that are designed to process the client requests according to
22 the other business domains.

1 3. (Original): A server system as recited in claim 1, wherein the
2 presentation layer is configured to determine a layout of content in the replies.

3
4 4. (Original): A server system as recited in claim 1, wherein the
5 presentation layer is configured to determine display attributes in the replies.

6
7 5. (Original): A server system as recited in claim 1, wherein the
8 different types of client devices support different data formats, the presentation
9 layer being configured to select appropriate data formats for encoding the replies.

10
11 6. (Original): A server system as recited in claim 1, wherein the
12 different types of client devices support different communication protocols, the
13 presentation layer being configured to select appropriate communication protocols
14 for delivering the replies to the clients.

15
16 7. (Original): A server system as recited in claim 1, wherein the
17 presentation layer is configured to determine how to display the replies for a
18 particular client.

19
20 8. (Original): A server system as recited in claim 1, wherein the
21 presentation layer comprises:

22 a presentation tier to determine how the replies will appear on the client
23 devices to users; and

24 a rendering tier, separate from the presentation tier, to determine how to
25 render the replies on the client devices.

1
2 9. (Original): A server system as recited in claim 1, wherein the
3 presentation layer comprises:

4 a tag library containing pre-constructed tags for a variety of data formats;
5 and

6 a request dispatcher to structure a reply for service back to a client device,
7 the request dispatcher being configured to access the tag library to obtain tags to
8 structure the reply according to a particular data format.

9
10 10. (Original): A server system as recited in claim 9, wherein the
11 request dispatcher is configured to select a communication protocol to be used to
12 serve the reply back to the client device.

13
14 11. (Original): A server system as recited in claim 9, wherein the
15 presentation layer further comprises a content renderer to conform the reply
16 structured by the request dispatcher to output capabilities of the client device to
17 which the reply will be returned.

18
19 12. (Original): In a server application that receives client requests for a
20 problem domain and has at least one problem solving module to generate replies
21 to be served back to clients, a presentation module separate from the problem
22 solving module, comprising:

23 a presentation component to construct how a reply will appear; and
24 a rendering component to configure how the reply is output on a particular
25 client.

1
2 **13.** (Original): A presentation module as recited in claim 12, wherein
3 the presentation component is configured to determine a layout of content to be
4 included in the reply.
5

6 **14.** (Original): A presentation module as recited in claim 12, wherein
7 the presentation component is configured to determine display attributes for the
8 reply.
9

10 **15.** (Original): A presentation module as recited in claim 12, wherein
11 the clients support different data formats, the presentation component being
12 configured to select an appropriate data format for encoding the reply for the
13 particular client.
14

15 **16.** (Original): A presentation module as recited in claim 12, wherein
16 the clients support different communication protocols, the presentation component
17 being configured to select an appropriate communication protocol for delivering
18 the reply to the particular client.
19

20 **17.** (Original): A presentation module as recited in claim 12, wherein
21 the rendering component is configured to conform the reply to a specific display at
22 the particular client.
23
24
25

1 **18.** (Currently amended): A computer software architecture embodied
2 on one or more computer-readable media, comprising:

3 a presentation tier to determine how data for communication to a client
4 device is to be presented on a the client device; and

5 a rendering tier, separate from the presentation tier, to determine how to
6 render the data on the client device.

7
8 **19.** (Original): A computer software architecture as recited in claim 18,
9 wherein the presentation tier is configured to determine at least one of (1) a layout
10 of the data, (2) a color scheme in which to present the data, (3) a presentation
11 theme, and (4) a particular skin appearance.

12
13 **20.** (Original): A computer software architecture as recited in claim 18,
14 wherein the presentation tier is configured to select a data encoding format for
15 encoding the data and a communications protocol in which to send the data to the
16 client device.

17
18 **21.** (Original): A computer software architecture as recited in claim 18,
19 wherein the presentation tier comprises multiple dispatchers, each dispatcher being
20 configured to encode the data according to a particular encoding format.

21
22 **22.** (Original): A computer software architecture as recited in claim 18,
23 wherein the presentation tier comprises multiple dispatchers, each dispatcher being
24 configured to package the data according to a particular communications protocol.

1 **23.** (Original): A computer software architecture as recited in claim 18,
2 wherein the presentation tier comprises:

3 a tag library containing pre-constructed tags for a variety of data formats;
4 and

5 a request dispatcher to structure the data using the tags from the tag library,
6 the tags being selected to structure the data in a manner that is supported by the
7 client device.

8

9 **24.** (Original): An architecture comprising:

10 a tag library containing pre-constructed tags for a variety of data formats;
11 multiple request dispatchers to structure replies to be returned to client
12 devices in response to requests submitted by the client devices, individual request
13 dispatcher formatting data according to particular formats that are supported by
14 the client devices; and

15 content renderer to conform the replies to output capabilities of the client
16 devices to which the replies are to be returned.

17

18 **25.** (Original): An architecture as recited in claim 24, wherein
19 individual request dispatchers are further configured to select communication
20 protocols to be used to serve the replies back to the client devices.

21

22 **26.** (Original): An architecture as recited in claim 24, wherein the
23 content renderer is configured to conform the replies to specific display types at
24 the client devices.

1 **27.** (Currently amended): A method comprising:
2 receiving a reply generated by a server application in response to a client
3 request;

4 structuring the reply to define how the reply will appear when
5 communicated to and presented at the client; and

6 independent of said structuring, conforming the reply to output capabilities
7 of the client.

8

9 **28.** (Original): A method as recited in claim 27, wherein the structuring
10 comprises selecting an encoding format in which to encode the reply.

11

12 **29.** (Original): A method as recited in claim 27, wherein the structuring
13 comprises selecting a communication protocol for sending the reply to the client.

14

15 **30.** (Original): A method as recited in claim 27, wherein the structuring
16 comprises selecting at least one of (1) a layout of content in the reply, (2) a color
17 scheme of the reply, (3) a skin theme, and (4) a logo to brand the reply.

18

19 **31.** (Original): A method as recited in claim 27, further comprising:
20 storing pre-constructed tags that can be used to construct the reply in
21 different formats; and
22 selecting at least one of the tags when structuring the reply.

1 **32.** (Original): A method as recited in claim 27, wherein the
2 configuring comprises sizing the reply for a display at the client.
3

4 **33.** (Currently amended): One or more computer-readable media
5 comprising computer-executable instructions that, when executed, direct an
6 application server to:

7 generate replies in response to client requests, the client requests being
8 submitted by diverse client devices that support different data formats and
9 different communication protocols; and

10 structure the replies to define how the replies will appear when
11 communicated to and presented on the client devices and independently from
12 individual replies for output capabilities of the client devices so that the replies are
13 encoded to comply with the data formats supported by the client devices and are
14 sent using the communication protocols of the client devices.

15

16 **34.** (Original): One or more computer-readable media as recited in
17 claim 33, further comprising computer-executable instructions that, when
18 executed, direct an application server to use pre-constructed tags to structure the
19 replies.